

(19) World Intellectual Property  
Organization  
International Bureau



(43) International Publication Date  
24 February 2005 (24.02.2005)

PCT

(10) International Publication Number  
WO 2005/016455 A2

(51) International Patent Classification<sup>7</sup>: A61P 07/02,  
A61K 39/395, C07K 16/36

(21) International Application Number:  
PCT/BE2004/000118

(22) International Filing Date: 16 August 2004 (16.08.2004)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:  
0319118.6 14 August 2003 (14.08.2003) GB  
0319345.5 18 August 2003 (18.08.2003) GB

(71) Applicant (for all designated States except US): D.  
COLLEN RESEARCH FOUNDATION VZW [BE/BE];  
Onderwijs & Navorsing, Campus Gasthuisberg, Herestraat  
49, B-3000 Leuven (BE).

(72) Inventors; and

(75) Inventors/Applicants (for US only): SAINT-REMY,  
Jean-Marie [BE/BE]; Rue du Lambais 79, B-1390  
Grez-Doiceau (BE). JACQUEMIN, Marc [BE/BE]; Rue  
Morimont 45, B-5330 Sart-Bernard (BE).

(74) Agents: BIRD, William, E. et al.; Bird Goën & Co, Klein  
Dalenstraat 42 A, B-3020 Winksele (BE).

(81) Designated States (unless otherwise indicated, for every  
kind of national protection available): AE, AG, AL, AM,  
AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN,  
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI,  
GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE,  
KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD,  
MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG,  
PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM,  
TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM,  
ZW.

(84) Designated States (unless otherwise indicated, for every  
kind of regional protection available): ARIPO (BW, GH,  
GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM,  
ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),  
European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI,  
FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI,  
SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ,  
GW, ML, MR, NE, SN, TD, TG).

Declaration under Rule 4.17:

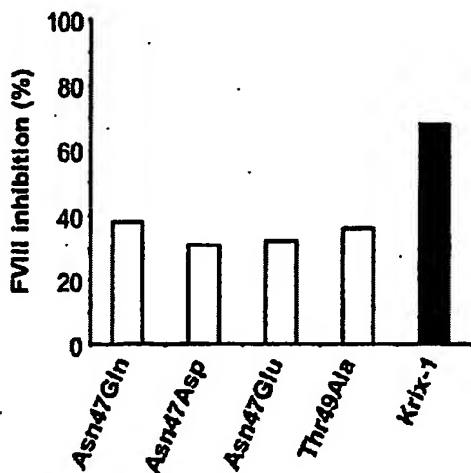
— of inventorship (Rule 4.17(iv)) for US only

Published:

— without international search report and to be republished  
upon receipt of that report

For two-letter codes and other abbreviations, refer to the "Guid-  
ance Notes on Codes and Abbreviations" appearing at the begin-  
ning of each regular issue of the PCT Gazette.

(54) Title: VARIABLE ANTIBODIES



(57) Abstract: The present invention discloses inhibitory anti-  
bodies against Factor VIII with modified glycosylation, either  
by enzymatic deglycosylation or by site directed mutagenesis.  
Said antibodies with modified glycosylation have equal affinity  
for FVIII but show different inhibiting properties. The use of  
one or a mixture of said antibodies allow modulation of the in-  
hibition of factor VIII to levels between 40 and 95%. The present  
invention further disclosed pharmaceutical compositions com-  
prising inhibitory antibodies against Factor VIII with modified  
glycosylation, combinations of these antibodies and methods  
for treating haemostasis disorders using said antibodies and an-  
tibody mixtures.

WO 2005/016455 A2